

Utility Patent Application

CONFIDENTIAL INFORMATION

5 Patent Application based on: Docket No. 03-1411
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ADJUSTABLE BOAT PLATFORM INSERT

RELATED APPLICATIONS

20 The present invention contains subject matter that was first described in
Disclosure Document Registration 528,486 filed on March 24, 2003 under 35
U.S.C. §122 and 37 C.F.R. §1.14. As such, it is respectfully requested that said
Disclosure Document is incorporated herein by reference as if fully rewritten and
remain a permanent part of the file history of the present application and be
relied upon during the pending prosecution, and for any other matters that may
arise.

25 There are no previously filed, nor currently any co-pending applications,
anywhere in the world.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to boat accessories, and, more particularly, to an adjustable boat platform insert that transforms a conventional v-hull or flat bottom boat into a bass boat. The present invention can be used in other manners than the preferred embodiment as said invention may be adapted to meet other needs. Such needs are envisioned to include being mounted on various footings to provide a means of transporting the invention. Other uses as a floating platform, ice shack, small boat, or general storage.

2. Description of the Related Art

Fishing is a hobbyist type sport that enjoyed around the world, by the young and old alike. After the fishing rod and tackle box, the fishing boat is the next most common piece of apparatus used in fishing. And, as with most apparatus, the fishing boat can be a very specialized piece of equipment. Many fishermen and applications prefer the size and maneuverability of a conventional "V" shaped hull boat, while others prefer the large area, elevated platform and comfort of a bass-style boat. While some people own multiple boats to ideally fit any fishing situation, others cannot enjoy such luxury due to cost constraints, storage limitations or usage requirements.

A search of the prior art did not disclose any patents that read directly on the claims of the instant invention; however, the following references were

considered related:

	Pat. No.	Description
5	6,405,985	Universal platform with horizontal mounting surface
	5,092,263	Boat utility platform and mounting clamp therefor
	6,101,966	Multipurpose utility station for boat with adjustable mount
	4,671,009	Boat fishing organizer formed as basket-like structure with attachment means for fishing accessories
10	5,209,178	Dual position boat seat
	4,738,217	Stern conversion seat and raised casting platform
	5,868,096	Boat seat
	5,826,532	Boat seat

Consequently, there exists a need for a means by which a conventional "V" shaped hull boat can be easily adapted to provide the comforts and conveniences of a bass-type boat without the disadvantages as listed above.

DESCRIPTIVE KEY

20	10	adjustable boat platform insert	100	rear seat arm
	15	conventional V-bottom boat	105	rear brace arms
	20	forward seat	110	lower second brace
	25	aft seat	115	second adjustable pins
25	30	captive pin set	120	third adjustable pins
	35	platform	125	intermediate support brackets
	40	frame	130	intermediate support
	45	central seat	132	first extension member
30	50	seat support stand	134	seat support mount
	55	storage compartments	136	fourth adjustable pins
	60	forward access hatch	137	second extension member
	65	rear access hatch	138	fifth adjustable pin
35	70	anchor access hatch	140	compartment hinges
	75	forward direction arrow	145	storage compartment lid
	80	forward seat arm	150	hatch hinges
	85	forward brace arms	152	elongated holes
	90	lower first brace	155	below deck storage space
	95	first adjustable pins	160	container wall

BRIEF DESCRIPTION OF THE DRAWINGS

The advantages and features of the present invention will become better understood with reference to the following more detailed description and claims taken in conjunction with the accompanying drawings, in which like elements are identified with like symbols, and in which:

FIG. 1 is an isometric view of the adjustable boat platform insert 10 shown in an installed state on a conventional v-bottom boat, according to a preferred embodiment of the present invention;

FIG. 2 is a top view of the frame 40 as used with the adjustable boat platform insert 10;

FIG. 3 is a side view of the frame 40 as used with the adjustable boat platform insert 10;

FIG. 4 is a top view of the platform 35 as used with the adjustable boat platform insert 10, and,

FIG. 5 is a sectional view of the adjustable boat platform insert 10 as seen along a line I - I as seen in FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The best mode for carrying out the invention is presented in terms of its preferred embodiment, herein depicted within the Figures 1 through 5.

1. Detailed Description of the Figures

Referring to FIG. 1, an isometric view of the adjustable boat platform insert 10 installed upon a conventional V-bottom boat 15 according to a preferred embodiment of the present invention is disclosed. A forward seat 20 and a aft seat 25 are provided in their normally expected locations. The forward seat 20 and the aft seat 25 are envisioned to be of a normal bench type and can be made of aluminum, steel, wood, fiberglass or other commonly available material. A captive pin set 30 secures a platform 35 to a frame 40(not shown in this FIG.) at six locations, two at the forward corners, two at the middle, and two at the aft corners. The platform 35 provides a flat, level, stable and elevated surface from which to perform fishing operations from. The overall function provided by said platform 35 is similar to that afforded by other types of fishing vessels such as a bass boat. A central seat 45 is provided in a central location affixed to a seat support stand 50 which is mounted to the frame 40 (not visible in this view). A plurality of storage compartments 55 are provided around the platform 35. A forward access hatch 60 is provided at the forward part of the platform 35, and a similar rear access hatch 65 is provided at the rear part of the platform 35. The rear access hatch 65 allows the use of the v-hull boat in a conventional manner by opening the hatches that allow the operator to operate the boat as they would normally operate without a platform. Finally, an anchor access hatch 70 is located at the rear part of the platform 35 near the outboard

side. The anchor access hatch 70 is to allow the operator to access a anchor winch or a anchor.

Referring now to FIG. 2, a top view of the frame 40 is depicted. This FIG. more clearly depicts the underlying structure of the adjustable boat platform insert 10. A forward seat arm 80 is provided with a set of two affixed forward
5 brace arms 85 which are connected to a lower first brace 90 via a set of first adjustable pins 95. The first adjustable pins 95 provides an adjustment point to allow the frame 40 to fit the conventional V-bottom boat 15 (not shown in this FIG.) of varying sizes. In a similar manner, a rear seat arm 100 is provided with a
10 set of two affixed rear brace arms 105 which are connected to a lower second brace 110 via a set of second adjustable pins 115. It is envisioned that the forward brace arms 85, the lower first brace 90, the rear brace arms 105 and the lower second brace 110 is manufactured of tubular aluminum or other lightweight and strong material, thus allowing the components to fit inside one of another
15 and allow for expansion as necessary. While the forward brace arms 85 and the rear brace arms 105 allow for adjustment to suit seats of varying heights, a set of third adjustable pins 120 allow the lower first brace 90 and the lower second brace 110 to adjust in overall length to suit the distance between the forward seat 20 (as shown in FIG. 1) and aft seat 25 (as shown in FIG. 1). Each lower
20 second brace 110 is affixed in its position from the other by a set of intermediate support brackets 125, which provide for structural stability and provide a base for

the seat support stand 50. The seat support mount 134 would slide into the seat support stand 50 being adjusted by the fifth adjustable pin 138. An intermediate support 130 provides additional support for the platform 35 (not shown in this FIG.) Intermediate support 130 has the second extension member 137 that
5 would slide in the same manner as the other adjustable parts into the first extension member 132 that extends off the lower second brace 110. Said supports are adjusted with fourth adjustable pins 136.

Referring next to FIG. 3, a side view of the frame 40 is disclosed. This FIG. more clearly shows the relationship of the frame 40 and the manner which it
10 provides support for the platform 35. The set of six captive pins set 30 (of which only three are visible in this view) are clearly visible atop the forward seat arm 80, the intermediate support 130 and the rear seat arm 100. The forward brace arms 85 adjusts in and out of the lower first brace 90 as adjusted by the first adjustable pins 95. The rear brace arms 105 adjusts in and out of the lower
15 second brace 110 as adjusted by the second adjustable pins 115. The intermediate support 130 is positioned by a fourth adjustable pins 136 that go through a second extension member and first extension member 132 that extend off of the intermediate support 130 and the lower second brace 110. These extensions extend upward with the intermediate support 130 sliding into
20 the first extension member 132 as the other adjustable parts. The seat support stand 50 extends upward through the intermediate support 130 with the

intermediate support encircling the seat support stand 50 at it center with the seat support mount 134 sliding into the seat support stand 50 the fifth adjustable pin 138 passing through them above the intermediate support 130.

Referring now to FIG. 4, a top view of the platform 35 is disclosed. The storage compartments 55, of which four are provided in this embodiment, provide access to individual compartments such as storage lockers, thermally insulated coolers, live bait containers, fish storage coolers and the like. Their proximity to the outward portion of the platform 35 provide for easy access. A pair of compartment hinges 140 on each storage compartment lid 145 holds it captive and prevents the storage compartment lid 145 from being lost overboard. The forward access hatch 60 and the rear access hatch 65 serve as points to allow access to the underside of the platform 35 as bordered by the hull of the conventional V-bottom boat 15 (not shown in this FIG.) The forward access hatch 60 and the rear access hatch 65 are bifold type hatches, and are held captive by sets of hatch hinges 150. Finally, the anchor access hatch 70 provides storage for an anchor if so used, as aforementioned described. Finally, a set of elongated holes 152 are provided to secure the platform 35 to the captive pin set 30 (not shown in this FIG.) upon the forward seat arm 80, (not shown in this FIG.) the rear seat arm 100, (not shown in this FIG.) and the intermediate support 130 (not shown in this FIG.) The elongated nature of the elongated holes 152 allows for the varying nature of the captive pin set 30 (not

shown in this FIG.) with respect to their spacing.

Referring finally to FIG. 5, a sectional view of the adjustable boat platform insert 10 as taken along a line I - I as seen in FIG. 3 is disclosed. This FIG. more clearly shows a below deck storage space 155 as aforementioned described.

5 The forward access hatch 60, as hinged by their hatch hinges 150 are shown in a partially open state. In a likewise manner, the port and starboard storage compartment lid 145 are shown in a partially open state as provided by their compartment hinges 140. The storage compartment lid 145 provide access to a space contained by container walls 160. It is envisioned that the container walls
10 160 could be thermally insulated in the case of a cooler, or solid in nature, or of a mesh material to allow for drainage.

It is envisioned that other styles and configurations of the present invention can be easily incorporated into the teachings of the present invention, and only one particular configuration shall be shown and described for purposes
15 of clarity and disclosure and not by way of limitation of scope.

2. Operation of the Preferred Embodiment

The preferred embodiment of the present invention can be utilized by the common user in a simple and effortless manner with little or no training. After
20 purchase of the adjustable boat platform insert 10, the typical user would install it upon their conventional V-bottom boat 15. Such installation would consist of

adjusting the frame 40 to fit the specific conventional V-bottom boat 15. Such adjustment would be accomplished by inserting or withdrawing the lower first brace 90 into and out of the lower second brace 110 and securing it with a third adjustable pins 120. In a similar manner, the forward brace arms 85 would be
5 adjusted with respect to the lower first brace 90 and secured with the first adjustable pins 95, and the rear brace arms 105 would be adjusted with respect to the lower second brace 110 and secured with the second adjustable pins 115. At this point the frame 40 is ready to be secured to the forward seat 20 and aft seat 25 of the conventional V-bottom boat 15. It is also envisioned that adhesive foam
10 should be shock absorbant adhereing to the lower first brace 90 and lower second brace 110 as well as other points of contact to the boat to cushion the platform from the boat. The forward seat arm 80 would connect to the forward seat 20 by the use of adhesive, mechanical fasteners such as screws or bolts, or other well-known fastening techniques. The fourth adjustable pins 136 are used
15 to set the height of the intermediate support to support the center of the platform with respect to the height of the forward seat 20 and the aft seat 25.

The platform 35 can be installed upon the frame 40 at this point in the installation or construction process. The platform 35 is set upon the forward seat arm 80, the rear seat arm 100 and the intermediate support 130 using the
20 elongated holes 152 and the captive pin set 30. The corresponding captive pin set 30 then protrude up through the elongated holes 152 and are thus secured.

At this point the seat support mount 134 would be put in place sliding inside the seat support stand 50 and adjusted to desired height with the fifth adjustable pin 138. The central seat 45 would then be mounted to the seat support mount 134. At this point the adjustable boat platform insert 10 is ready for use.

5 During actual use of the conventional V-bottom boat 15 equipped with the adjustable boat platform insert 10, the user can enjoy access to the storage compartments 55 which could be equipped with storage lockers, thermally insulated coolers, live bait containers, fish storage coolers and the like. In a similar manner, the user can access the below deck storage space 155 via the
10 forward access hatch 60 and the rear access hatch 65. Rear access hatch 65 allows normal operation of the boat without having to remove the platform, once removed it has other possible uses.

 It is also envisioned that the platform 35 can be removed from the frame 40 to allow use of the conventional V-bottom boat 15 in a conventional manner
15 where the functionality of a V-bottom boat would be needed, as the presence of the frame 40 would not affect functionality.

 The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms
20 disclosed, and obviously many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to

best explain the principles of the invention and its practical application, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the
5 Claims appended hereto and their equivalents. Therefore, the scope of the invention is to be limited only by the following claims.